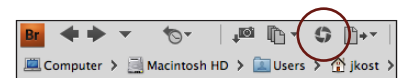


Photoshop CS4 - What's New in Camera Raw 5

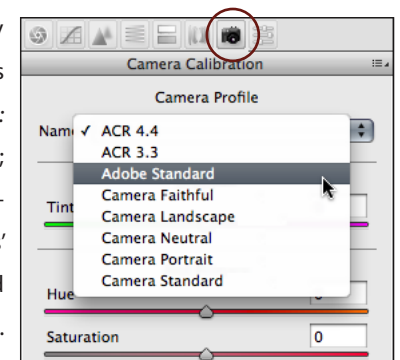
This PDF is designed to quickly familiarize you with the new features in the Camera Raw 5 plug-in (CR5). There have been several new features as well as significant enhancements to previous options - all of which are designed to help save you time while creating the highest quality image possible. Just as a reminder, the primary benefit of working with images in CR5, is that all of the adjustments and refinements that are made are non-destructive and can be altered and processed an infinite number of times with as many different settings as you can imagine. And currently, CR5 supports over 200 different camera manufacturer's camera makes and models as well as DNG, JPEG and TIFF files!

We should begin by discussing how to open your files into CR5 based on whether you want them to open in Photoshop or Bridge. The advantage of opening files in Bridge is that Photoshop doesn't have to be running. For example, you have a laptop with only 2 GB of ram and need to have a dozen other applications open at the same time you're making refinement to your photos you may want to refine them in Bridge, not Photoshop. The other advantage is that after making any adjustments in CR5, when you click "Done", you will be returned to Bridge, not Photoshop. Since this really isn't much of an issue for most people, the default when double clicking DNG and/or raw file(s) in Bridge, is for Bridge to hand off the files and open them using CR5 in PS (so that when clicking "Done" you will remain in Photoshop). For those of you that want Bridge to hold-on to the DNG and/or raw file(s) when double clicking (to edit them using CR5 in Bridge), check the "Double-click Edits Raw Setting in Bridge" in Bridge's General Preferences.

If you want to work with TIFF and JPEG files in CR5 in Bridge, select the images and click the new "Open in Camera Raw" icon to select "Open in Camera Raw" or Cmd (Mac) / Ctrl (Win) + R to open in Camera Raw in Bridge or right mouse-click (Ctrl click on Mac with a single button mouse). If you simply double click on a TIFF or JPEG (by default) it will open in Photoshop - unless any setting have been previously applied to the TIFF and/or JPEG files (settings, for example, that were previously applied in Photoshop or in Lightroom). If you prefer for CR5 to ignore any previously applied settings or want Photoshop to automatically open the file with the setting applied (bypassing the CR5 dialog), you can change these options in the Camera Raw Preferences (Adobe Bridge CS4 > Camera Raw Preferences (Mac) / Edit > Camera Raw Preferences (Win)).

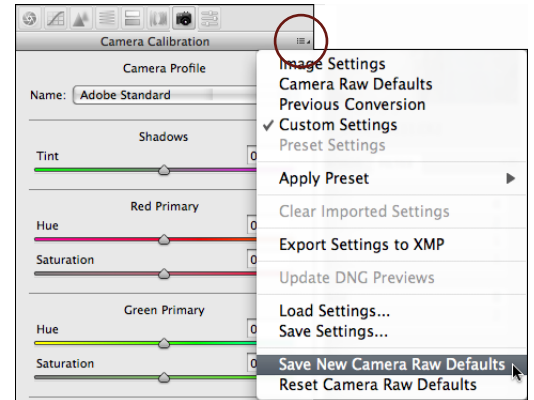


Before we get to the new tools, we need to talk about profiles. The engineers have been actively working on improving color rendering for digital raw photographs and as a result, CR5 now supports additional camera profiles which can be downloaded and installed from <http://labs.adobe.com>. *Note: the profiles will begin shipping with the plug-in automatically later this Fall.* There are two basic profiles; the Adobe Standard camera profiles that significantly improve color rendering, especially in reds, yellows, and oranges, and the Camera Matching (CM) profiles that emulate the camera manufacturers' color appearance. The CM profiles are intended for photographers who appreciate the workflow and toolset provided by CR5 but prefer the color rendering provided by the camera vendors' own software. (All CM profiles are identified with the prefix Camera in ACS's Profile popup menu.)



Every profile that is provided is camera-specific. Even the older profiles (e.g., ACR 3.3, ACR 4.4) are camera-specific. In fact, the profile menu in CR5 will only show profiles for your camera (for example, if you work with Nikon files, the profiles listed will match the Nikon Picture Controls, or if you work with Canon files, the profiles listed will match the Canon Picture Styles). *Note: the CM profiles are NOT expected to match the embedded in-camera JPEG, especially if you have established custom in-camera settings.*

To access and apply these profiles, open an image in CR5 and, in the Camera Calibration tab, select your desired profile from the Camera Profile popup menu. Then click on the flyout popup menu (to the right of the words "Camera Calibration") and choose Save New Camera Raw Defaults. The profile will be applied to the image selected as well as be automatically applied to all new images.

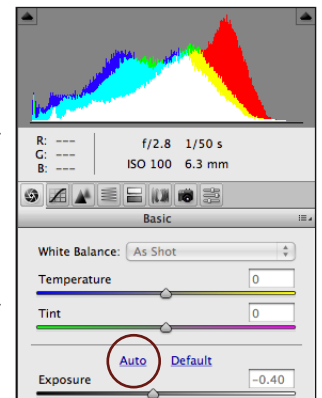


If you have legacy files that you want to apply a profile to, open the images in CR5 and choose your desired profile from the Camera Profile popup menu in the Camera Calibration tab. Then click the Synchronize... button and choose "Camera Calibration" from the ensuing dialog box's Synchronize popup menu and click OK. If you find yourself doing this a lot, you can save yourself time by making a preset. Click on the flyout popup menu on the right-hand side of the CR dialog box and choose "Save Settings...". Choose "Camera Calibration" from the ensuing dialog box's Subset popup menu, then click "Save...". Then whenever you need to apply your preset to a group of images, choose "Apply Preset" from the flyout popup menu.

Remember, the new Adobe Standard and CM camera profiles provide great "out-of-the-box" results - they are only default starting points for further image adjustments and are not (and will never be) substitutes for a photographer's creative vision. Therefore, treat the new profiles as starting points but use the color and tone rendering controls provided by CR5 (e.g., HSL sliders, Fill Light, Parametric Curves, etc.) to make your desired image-specific adjustments.

In addition, Adobe announced the DNG Profile Editor, a free software utility for editing camera profiles which can be found on adobe.com (but is beyond the scope of this document).

Now, I think it's best to proceed in the order in which the new tools and enhancements will most likely be used, (as oppose to the order that they appear in the interface), so keeping in mind that I want to first create global adjustments and then move to the local, I'll begin with the Auto command in the Basic panel. Depending on the image, the Auto feature is an excellent way for CR5 to automatically expand the dynamic range of an image by redefining the black and white points of an image (especially those taken in low contrast situations). Of course you can always further refine any of the sliders in CR5 after running auto, but I think you'll find it does a respectable job with out making the image as bright as we did in previous versions. A quick point that I want to make, before we move on - if you're making adjustments by the numbers (and even if you only using the histogram as a visual reference), make sure to set up your workflow options at the bottom of the dialog box - changing the bit depth and color space that you're going to open the file into can make a significant difference in those values.

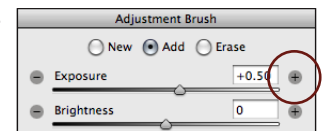


After making any global corrections, the next step is to refine any local regions so I will proceed to the two new non-destructive localized correction tools - the Gradu-



ated Filter (G) and the Adjustment Brush (K). Selecting either of the icons displays their options in the panel area. In my opinion, these two tools are the most powerful features added to this release of CR5 - because not only can they be used in the traditional manner as dodge and burn tools by increasing or decreasing exposure and brightness, they can be "loaded" with additional adjustments including contrast, saturation, clarity, sharpness and color (excellent for toning grayscale images, creating creative colorization effects and correcting mixed lighting environments).

The first time that you "load" a brush (or select one of the parameters) you will most likely use the + or - icons next to the sliders. But as you get more advanced, you will notice that if you try to change more than one attribute (exposure *and* clarity for example), clicking on the on the second parameter's + or - icons resets the first parameter! So, if you are going to make multiple changes at one time, you will want to use the sliders.



Before painting, be sure to set the Size, Feather, Flow and Density of the brush. The Size and Feather sliders work just like any brush in Photoshop and, in fact, they even share keyboard shortcuts (the right and left brackets to increase/decrease brush size, adding the shift key will increase/decrease the feather (or hardness of the brush). However, in CR5, the brush icon provides a bit of additional feedback - the inner circle is the size of the brush



and the outer circle shows the feather (or fade region of the brush). Another way to increase/decrease the size of the brush is to Control (Mac) / Cmd (Win)-drag. Add the Shift key to increase/decrease the feather. The Flow slider is similar to the opacity setting in Photoshop. If you set the Flow to 100, then you get the maximum effect in one brush stroke. Decreasing the Flow allows you to slowly build up the change over multiple strokes. *Note: to try this yourself, increase the exposure by 2 stops, then lower the flow dramatically and paint a single stroke. Then, paint again and watch the exposure slowly increase with each stroke. Eventually, even if the flow is set very low, if you paint enough strokes, it will build to the maximum change.* The Density sets a limit to the total amount of change that can take place. For example, with the Flow to 100, if you set the exposure to -2 stops and set the Density to 100, then making a stroke will give you a -2 stop change in exposure. If you reduce the density to 50 you are essentially capping the amount of change to 1/2. Therefore the stroke that you make will only darken the image by 1 stop.

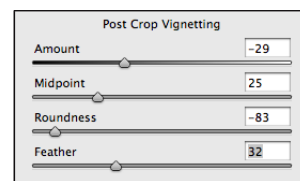
When you paint your first paint stroke the Adjustment brush will place down a “pin”. As you continue painting, any additional strokes are being added to that pin (as if they are a single set or collection of brush strokes) and if you make any adjustments to the sliders, all of the strokes associated with that pin will be modified. If you want to hide the pin, uncheck the option in the lower left of the panel or tap the “V” key to toggle it’s visibility. If you position the cursor over the pin it will display the strokes as a mask (with a while overlay) or you can check the “Show Mask” option at the bottom of the panel.



If you paint in the wrong area, select the Eraser and paint to subtract from your adjustment (or use the Option (Mac) / Alt (Win) to temporarily toggle between the two). Notice that the paint and eraser options are purposely “sticky” to the last settings. This way, if you want to set the brush to be soft but the eraser to be hard, CR5 will remember the settings. If you want to add a second adjustment (independent from the first) click the “New” radio button in the panel, load the brush, set the size and other options and begin painting. When working with images that have hard edges, using Auto Mask (M - toggles it on and off) can help constrain your adjustments to areas that match the same tonality and color. To delete a pin, click on it to select it (the center will be highlighted with a dark black center), and click the delete key. Use the Preview option to toggle on and off the visibility of all of the adjustments. To clear all pins click “Clear All”.

Use the Graduated Filter tool to apply any adjustment based on a linear gradient (i.e where you may have previously used a graduated filter in-camera). Selecting the Graduated Filter displays the same 7 adjustments that are available when using the selective Adjustment brush. Use the sliders to make your adjustments, then drag the graduated filter over the image. Just like the Adjustment brush, the Graduated filter is non-destructive and the sliders can be modified before or after dragging or painting with the tool. Click on either circle (red or green) to change the length of the filter, click on the start or end line to rotate (when you see the double headed arrows), and click on the center line to move the filter.

After making localized corrections it’s time to try out the new Post Crop Vignetting sliders in the Lens Correction panel. Unlike the Lens Vignette (which removes vignetting caused by camera lens), Post Crop Vignetting is designed for creative vignetting effects regardless of the image’s crop. Adjust the Amount (making the edges lighter or darker), Midpoint (defining the spread), Roundness (square to circular) and Feather (soft or hard edge) for some incredibly artistic edge effects. And even if the crop is modified at any time, the Post Crop Vignette will be updated.



The Spot Removal tool has a new Opacity slider which can be very useful to diminish something in an image (perhaps a freckle or a mole) without eliminating it altogether. All of these new adjustments (including the localized adjustments) can be saved as presets and/or be synchronize to multiple images to save time and increase productivity. And copying and pasting setting and/or applying presets can be done without even having to even go into CR5! Simply right mouse-click (Ctrl click on Mac with a single button mouse) on an image thumbnail(s) in Bridge and select Develop Settings and then the desired preset.

Finally, regardless if you are working with Bridge or Lightroom, your images will both share the same raw processing engine - Adobe Camera Raw making the integration between the two applications tighter than ever - especially if you’re using a Smart Object workflow!